

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claims 1-23 (canceled)

24. (Amended) A silicon-backed microdisplay structure formed on a silicon substrate, the structure comprising:

[a silicon substrate;]

a silicon-side conductive layer [disposed] formed directly on the silicon substrate;

a silicon-side passivation layer 2000-6000 angstroms thick [disposed] formed directly on the silicon-side conductive layer;

a cover glass sheet;

a glass-side conductive layer [disposed] formed directly on the cover glass sheet;

a glass-side passivation layer [of a predetermined material and thickness disposed]

formed directly on the glass-side conductive layer; and

liquid crystal material [sandwiched] disposed directly between the glass-side passivation layer and the silicon-side passivation layer;

[wherein] the glass-side passivation layer [is] being about 300-900 angstroms thick and [comprises] comprising a material selected from the group consisting of CeO₂, In₂O₃, MgO, SnO₂, Ta₂O₅, TiO₂, Y₂O₃, SiO₂, ZnO, Al₂O₃, BeO, MgF₂ and combinations thereof,

such that the work function balance of said silicon-backed microdisplay is in the range of approximately 0.2eV to 0.4eV.

25. (Currently Pending) A silicon-backed microdisplay as in claim 24, and wherein the silicon-side conductive layer comprises aluminum.

26. (Currently Pending) A silicon-backed microdisplay as in claim 24, and wherein the silicon-side passivation layer comprises a silicon dioxide layer in combination with a silicon nitride layer.

27. (Amended) A silicon-backed microdisplay as in claim 24, and wherein the glass-side conductive layer comprises [a material that includes] Indium-tin oxide (ITO), has a characteristic resistance in the range of 100-500 ohms/square and a light transmissivity of 90% or greater.

28. (Currently pending) A silicon-backed microdisplay as in claim 24, and wherein the combination of the glass-side passivation layer and the glass-side conductive layer has an overall transmissivity of 90% or greater and a reflectivity of less than 1%.